

WHAT IS CLAIMED IS:

1. A dispenser for dispensing sheet material, said dispenser comprising:
a housing defining an interior for accommodating first and second sources of sheet material, and an outlet through which the sheet material is dispensed;
a first rotatable roller in the housing, a portion of the sheet material being in contact with the first roller prior to being dispensed through the opening; and
a transfer mechanism configured to transfer dispensing of sheet material from a first mode wherein sheet material is dispensed from the first source to a second mode wherein sheet material is dispensed from the second source, said transfer mechanism including a second rotatable roller having a slot passing completely through the second roller to retain a free end portion of the sheet material from the second source when the sheet material is dispensed in the first mode.

2. The dispenser according to claim 1, wherein said first roller has at least one recessed portion, and wherein said second roller has at least one raised portion aligned with said recessed portion, said recessed portion and said raised portion being configured such that when sheet from said first source covers said recessed portion said transfer mechanism does not transfer dispensing from said first mode to said second mode.

3. The dispenser according to claim 1, wherein said first roller has a first surface, and said second roller has a second surface, said second surface contacting sheet material on said first surface during at least dispensing in the first mode.

4. The dispenser according to claim 3, wherein said first surface has a higher coefficient of friction than a coefficient of friction of said second surface.

5. The dispenser according to claim 4, wherein said first surface is formed from rubberized material.

6. The dispenser according to claim 4, wherein said second surface is formed from plastic material.

7. The dispenser according to claim 1, wherein the transfer mechanism further includes at least one biasing element biasing the second roller toward said first roller.

8. The dispenser according to claim 1, further comprising a third roller, forming a nip with said first roller, sheet material passing through the nip during dispensing in the first and second modes.

9. The dispenser according to claim 8, further comprising a biasing element biasing said first roller toward said third roller.

10. The dispenser according to claim 8, further comprising a driving mechanism configured to rotate at least one of said first and third rollers.

11. The dispenser according to claim 10, wherein the driving mechanism includes a manually driven element.

12. The dispenser according to claim 10, wherein the driving mechanism includes an electric motor coupled to one of said first and third rollers.

13. The dispenser according to claim 8, further comprising a shield, said shield limiting contact between said free end of sheet material from said second source and said first roller before said transfer mechanism transfers dispensing to said second mode.

14. The dispenser of claim 1, wherein the transfer mechanism is configured to transfer dispensing from said first mode to said second mode when sheet material from the first source is not between the first and second rollers.

15. The dispenser of claim 14, wherein said second roller is configured to rotate when sheet material from the first source is not between the first and second rollers.

005496460

16. The dispenser of claim 8, wherein the third roller includes a cutter for cutting the sheet material.

17. A dispenser for dispensing sheet material, said dispenser comprising:
a housing defining an interior for accommodating first and second sources of sheet material, and an outlet through which the sheet material is dispensed;

a first rotatable roller in the housing, said first roller having at least one recessed portion, a portion of the sheet material being in contact with the first roller prior to being dispensed through the opening; and

a transfer mechanism configured to transfer dispensing of sheet material from a first mode wherein sheet material is dispensed from the first source to a second mode wherein sheet material is dispensed from the second source, said transfer mechanism including a second rotatable roller having a retainer to retain a free end portion of sheet material from the second source when the sheet material is dispensed in the first mode, said second roller having at least one first raised portion aligned with said recessed portion, said recessed portion and said raised portion being configured such that, when sheet from said first source covers said recessed portion, said transfer mechanism does not transfer dispensing from said first mode to said second mode.

18. The dispenser according to claim 17, wherein the second roller has at least one second raised portion opposite said at least one first raised portion, said second raised portion being configured such that when sheet from said second source covers said recessed portion said second roller is oriented to receive sheet from a new source.

19. The dispenser according to claim 18, wherein said first roller has a first surface, and said second roller has a second surface, said second surface contacting sheet material on said first surface during at least dispensing in the first mode.

20. The dispenser according to claim 19, wherein said first surface has a higher coefficient of friction than a coefficient of friction of said second surface.

21. The dispenser according to claim 20, wherein said first surface is formed from rubberized material.

22. The dispenser according to claim 20, wherein said second surface is formed from plastic material.

23. The dispenser according to claim 17, wherein the transfer mechanism further includes at least one biasing element biasing the second roller toward said first roller.

24. The dispenser according to claim 17, further comprising a third roller, said third roller forming a nip with said first roller, sheet material passing through the nip during dispensing in the first and second modes.

25. The dispenser according to claim 24, further comprising a driving mechanism configured to rotate at least one of said first and third rollers.

26. The dispenser according to claim 25, wherein the driving mechanism includes a manually driven element.

27. The dispenser according to claim 25, wherein the driving mechanism includes an electric motor coupled to one of said first and third rollers.

28. The dispenser according to claim 17, further comprising a shield, said shield limiting contact between said free end of sheet material from said second source and said first roller before said transfer mechanism transfers dispensing to said second mode.

29. The dispenser of claim 17, wherein the transfer mechanism is configured to transfer dispensing from said first mode to said second mode when sheet material from the first source is not between the first and second rollers.

30. The dispenser of claim 29, wherein said second roller is configured to rotate when sheet material from the first source is not between the first and second rollers.

31. The dispenser of claim 24, wherein the third roller includes a cutter for cutting the sheet material.

32. A method of dispensing sheet material, comprising:

providing a dispenser containing first and second sources of sheet material, the dispenser including a first rotatable roller having at least one recessed portion and a second rotatable roller having at least one raised portion, the second roller having a retainer;

dispensing sheet material from the first source by passing the sheet material between the first and second rollers;

retaining, in the retainer on the second roller, an end portion of sheet material from the second source;

limiting rotation of the second roller by contacting the raised portion of the second roller against the sheet material between the first and second rollers;

placing the second roller in contact with the first roller when sheet material from the first source is no longer between the first and second rollers; and

rotating the second roller to thereby feed sheet material from the second source onto the first roller to permit dispensing of sheet material from the second source.

33. The method of claim 32, wherein the dispenser includes a third rotatable roller forming a nip with said first roller, and wherein the method further includes passing sheet material through the nip.

34. The method of claim 32, wherein the retainer includes a slot passing completely through the second roller, wherein the retaining includes passing the end portion of the sheet material from the second source through the slot.

LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000